



Hempaguard X7 reduces fuel consumption on Toll Shipping's newbuild Ro-Ro Vessels

When demand for cargo between the Australian states of Victoria and Tasmania began to increase, Toll Shipping expanded its capacity by commissioning two newbuild Ro-Ro vessels. Toll Shipping's strong focus on reducing its environmental impact meant that our complete coatings and services package for the two vessels included our advanced Hempaguard X7 and Globic 9000 coatings to combat hull fouling.

For shipping, hull fouling - such as barnacles, algae, and other marine organisms - can be a significant issue. It can lower speeds and mean more fuel is needed to move the ship through the water. On fast vessels like Toll Shipping's new Ro-Ro vessels, the increase in fuel consumption and associated emissions can be significant.

Hempaguard X7 has been proven to effectively combat fouling on multiple vessels, whatever the vessel's trading pattern. As a result, it ensures an extremely low average speed loss of just 1.4 per cent. This translates into minimum out-of-dock fuel and emissions savings of 6 per cent compared to traditional antifouling - although savings can be much higher.

Toll Shipping's new Ro-Ro vessels were delivered in 2018. After three years in service, the hull coating system continues to keep fouling at bay, which has significantly reduced the vessels' fuel costs and emissions.

"Over the years, we have used several paint manufacturers on our vessels. With the new vessels following a comprehensive evaluation, we returned to Hempel to provide the full package of vessel coatings to give performance, long life, and value for money. We are very pleased with both the performance up to now and the after sale technical support for ongoing maintenance."

Adam Manders - Ship Manager

Three Hempel ‘guardians’ protect Ro-Ro newbuild ferries

Headquartered in Australia, Toll Shipping is a leading freight and logistics company.

The challenge

Toll Shipping commissioned the two newbuild Ro-Ro vessels to replace its existing vessels serving routes between the Australian states of Victoria and Tasmania. When the vessels were designed, the company asked us to create a complete coatings and services package that would reduce maintenance requirements and fuel consumption across the vessels’ entire service lives.

The solution

Our coatings package included three proven Hempel ‘guardians’. As well as Hempaguard X7 on the hull to reduce fuel use and emissions, Hempadur Spray-Guard was used on the ramps and decks and Avantguard on the exposed superstructure and cargo holds.

Hempadur Spray-Guard is a specially developed heavy-duty coating for steel that is exposed to severely corrosive and abrasive conditions. On the newbuild Ro-Ro vessels, it ensures the decks and ramps require little or no maintenance over the long-term. Avantguard is an award-winning activated zinc primer that utilises three methods of corrosion protection: the barrier, inhibitor and galvanic effects. As a result, it can provide the same or better corrosion protection than equivalent zinc-rich coatings, but with fewer coats or at thinner dry film thicknesses. On the vessels’ superstructure and cargo holds, it will extend coating lifetime and reduce maintenance requirements.

As part of our technical service package, we assigned a dedicated team of coating advisors to oversee application. Onsite throughout the project, the advisors ensured that all coatings were applied according to specification, and that application time, waste and costs were minimised. We continue to work with Toll Shipping, supplying sea stock coatings for their Ro-Ro vessels and shipping containers.



At a glance	
Company	Toll Shipping
Vessels	2 x 12,000 DWT Ro-Ro vessels: Victorian Reliance II, Tasmanian Achiever II
Year of delivery	2018
Location	Jiangsu Jinling Shipyard, China
Main anticorrosive coating	Hempadur Quattro XO 17720
Fouling defence & antifouling coatings	Hempaguard X7 (vertical sides), Globic 9000 (flat bottom)
Specialty coatings	Hempadur Spray-Guard (Ro-Ro decks), Avantguard (external superstructure, decks and cargo holds – walls and ceiling)

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